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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------------------|-------------|----------------------|---------------------|------------------|
| 09/598,213 | 06/21/2000 | Jeom Jae Kim | 8733.20105 | 8092 |
| 30827 | 7590 | 10/17/2003 | EXAMINER | |
| MCKENNA LONG & ALDRIDGE LLP | | | QI, ZHI QIANG | |
| 1900 K STREET, NW | | | ART UNIT | PAPER NUMBER |
| WASHINGTON, DC 20006 | | | 2871 | |

DATE MAILED: 10/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

09/598,213

Applicant(s)

KIM ET AL.

Examiner

Mike Qi

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 August 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5,7,10-13,15,16,19,20,22-30,32-36,38,40,42 and 43 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

- 5) ☐ Claim(s) _____ is/are allowed.

- 6) ☒ Claim(s) 1-5,7,10-13,15,16,19,20,22-30,32-36,38,40,42 and 43 is/are rejected.

- 7) ☐ Claim(s) _____ is/are objected to.

- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-5,7,10-13, 15-16,19-20, 22-30, 32-36, 38, 40, 42-43 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-56 of U.S. Patent No. 6,335,776 in view of US 6,462,798 (Kim et al).

Although the conflicting claims are not identical, but they are not patentably distinct from each other because the claims 1 and 12 of this application and the claims 1-56 of the U.S. Patent No. 6,335,776 have corresponding limitations except a few wording are different, and substantially they have the doctrine of obviousness-type double limitations.

The claim 1 of this application has a limitation "each pixel region having a common-auxiliary electrode". The claim 1 of the patent US 6,335,776 has a limitation

“an auxiliary electrode on a same layer whereon said pixel electrode is formed” that would be the same meaning of the pixel region having a common-auxiliary electrode.

The claim 12 of this application has a limitation “a common-auxiliary electrode surrounding said pixel region on a same layer wherein said gate bus line is formed”. The claim 2 of the patent US 6,335,776 has a limitation “wherein said auxiliary electrode is in a region other than a region where said pixel electrode is formed” that would cover the claim 12 as the region surrounding the pixel region would be the region other than the region where said pixel electrode is formed.

All the other limitations claimed in the claims 1 and 12 of this application are corresponding to the claims 1-56 of the US 6,335,776.

Concerning the limitation “a storage electrode overlapping a common-auxiliary electrode in a pixel region neighboring the pixel region in the second direction”, the patent US 6,462,798 (Kim et al) discloses (col.4, lines 22-25; Fig.9) that a storage electrode is formed to overlap common-auxiliary electrode (15) so as to make a storage capacitor with common-auxiliary electrode (15). Forming a storage capacitor must use two electrodes and an insulating layer and that is conventional to hold the display signal.

Therefore, the claims 1 and 12 of this application and the claims 1-56 of the patent US 6,335,776 substantially have the doctrine of obviousness-type double limitations, and they have at least an obviousness-type difference.

Claims 2-4, the common-auxiliary electrode having connecting parts (protrusions) to connect the neighbor pixel regions that would be covered by the limitations of the US

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6,355,776 in which the auxiliary electrode is in a region other than the region where the pixel electrode is formed so as to surround the pixel electrodes.

Claims 5, 7, 10-11, 13, 15-16, 19-20, 22-30, 32-36, 38, 40 and 42-43, concerning the pixel electrode overlaps the common-auxiliary electrode, the storage electrode overlapping the gate bus line, the pixel region is divided into two portions, the alignment layer is divided into two portions are covered by the claims 1-56 of the US 6,335,776; and the US 6,462,789 disclosed (col.3, line 23 – col.14, line 4; Figs.2-3) the features that concerning the pixel electrode has a window, the passivation layer has a window, the gate insulator has a window, the common electrode has a window, the color filter layer has a window so as to provide a multi-domain LCD having high response time characteristics and high brightness display, and that would have been at least obvious.

Since the US 6,462,789 indicates (col.7, lines 3-10) the inducing windows (e.g., the electric field inducing windows in the pixel electrodes) to form a multi-domain LCD, and that is easy to control the alignment directions in domains, which obtains wide viewing angle and multi-domain effect.

Therefore, it would have been obvious to those skilled in the art at the time the invention was made to arrange electric field inducing windows for controlling the alignment direction easier and obtaining wide viewing angle effect.

Response to Arguments

3. Applicant's arguments filed on Aug.5, 2003 have been fully considered but they are not persuasive.

Applicant's **only** arguments are as follows:

1) None of the references teaches or suggests the feature of "a storage electrode overlapping a common-auxiliary electrode in a pixel region neighboring the pixel region in the second direction" as claimed in claims 1 and 12.

Examiner's responses to Applicant's **only** arguments are as follows:

1) Concerning the limitation "a storage electrode overlapping a common-auxiliary electrode in a pixel region neighboring the pixel region in the second direction", the patent US 6,462,798 (Kim et al) discloses (col.4, lines 22-25; Fig.9) that a storage electrode is formed to overlap common-auxiliary electrode (15) so as to make a storage capacitor with common-auxiliary electrode (15). Forming a storage capacitor must use two electrodes and an insulating layer and that is conventional to hold the display signal.

Therefore, the claims 1 and 12 of this application and the claims 1-56 of the patent US 6,335,776 substantially have the doctrine of obviousness-type double limitations, and they have at least an obviousness-type difference.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mike Qi whose telephone number is (703) 308-6213.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Mike Qi
September 29, 2003


TOANTON
PRIMARY EXAMINER